



ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY
SCHOOL OF GRADUATE STUDIES
COLLEGE OF ARCHITECTURE AND CIVIL ENGINEERING

**Assessment of Real Property Valuation Method Practice in
Ethiopian Banks- In Addis Ababa**

By
Elizabeth Shewaye

A Project Submitted To School of Graduate Studies of Addis Ababa Science & Technology University in Partial Fulfillment of the Requirements for the Masters of Engineering Degree in Construction Technology and Management.

May, 2017
Addis Ababa, Ethiopia



**ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY
COLLEGE OF ARCHITECTURE AND CIVIL ENGINEERING**

**Assessment of Real Property Valuation Method Practice in Ethiopian Banks-
In Addis Ababa**

By: Elizabeth Shewaye

Date of Defense: May 27, 2017

Members of the Examining board:

Name	Signature	Date
1. Dr. Brook Abate Internal Examiner	_____	_____
2. Mr. Simon G/ Egziabher Head , Civil Eng’g Department	_____	_____
3. Dr. Brook Abate Dean, College of Arc and Civil Engineering	_____	_____

Certification

I, the undersigned, certify that I read and hear by recommend for acceptance by Addis Ababa Science and Technology University a dissertation entitled “**Assessment of Real Property Valuation Method Practice in Ethiopian Banks- In Addis Ababa**” in partial fulfillment of the requirement for the degree of Master of Engineering in Construction Technology and Management.

Declaration

I declare that this Study entitled “Assessment Of Real Property Valuation Method Practice In Ethiopian Banks- In Addis Ababa” is my original work. This study has not been presented for any other university and is not concurrently submitted in candidature of any other degree award, and that all sources of material used for the study have been duly acknowledged.

Candidate:

Elizabeth shewaye

Signature: _____

Acknowledgement

Above all I would also like to thank God for making this possible with his mother. I feel blessed to have him guide and protect me in every step I take towards any achievement.

I would like to convey my sincere gratitude to my Instructor Dr.Girmay kahsay for his continued guidance and great support for the successful accomplishment of the study.

I would like to thank all who have given assistance in obtaining the information and data related to this work especially the people who took time from their busy schedule to fill my questionnaire.

My special thanks goes to my family and friends who helped me during my study process to get me back on track and sometimes push me in the right direction. I am very thankful for the patience they had and continuous encouragement they gave me.

Table Of Content

Certification.....	i
Declaration.....	ii
Acknowledgement	iii
List Of Table.....	vi
Abbreviation	vii
Abstract.....	viii
1. INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Statements of the Problem	2
1.3 Objective of the Study	3
1.4 Research Questions	3
1.5 Scope and limitation	3
1.6 Organization of the Study	4
2. LITERATURE REVIEW	5
2.1 Definition and Concepts	5
2.2 International Practice of property valuation Method	6
2.3 Property Valuation Practice In Ethiopia	10
2.4 Purpose of Real Property Valuations	10
2.5 Principle of Valuation	12
2.6 The Valuer	12
2.7 Depreciation.....	13
2.8 Mortgage	14
2.9 Methods of Property Valuation.....	15
2.9.1 Income Capitalization/rental Approach	15
2.9.2 Sales Comparison Approach	16
2.9.3 Cost Approach.....	16
2.9.4 The profit or Accounting Method	18
2.9.5 The Residual Method	18
2.9.6 The Investment Method	19

2.9.7 The Reinstatement Method	19
2.10 Choice of Method of Property Valuation.....	19
2.11 Overview of Ethiopian Banks Practices of Property valuation	21
2.12 Property Class	23
2.12.1 Commercial /Investment Properties	23
2.12.2 Residential Properties	24
2.12.3 Specialized Properties.....	24
3. MATERIALS AND METHODS	26
3.1 Approach of the Study	26
3.2 Data Collection	26
3.3 Sample Size of the Study	26
3.4 Questionnaire Design.....	27
4. RESULTS AND DISCUSSIONS.....	28
4.1 Assess and review the practice of methods or technique of real property valuation in Ethiopian Banks	28
4.2 To Asses And Identify The Problems And Difficulties Deemed To Be A Cause of Variation That Arises In Real Property Valuation Of The Banks	29
4.3 To Recommend On Improved Property Valuation Method In Ethiopian Banks.....	31
5. SUMMARY AND CONCLUSION	32
6. REFERENCE.....	34
APPENDIX.1	36
QUESTIONNAIRE.....	36
APPENDIX.2	40
International Standard Valuation Process	40
APPENDIX.3	41
Overview of The Valuation Process	41

List of Table

Table 2.1: Summary: Types of Real property and its Valuation Method

Table 2.2: Valuation Approach **Commercial /Investment property**

Table 2.3: Valuation Approach **Residential property**

Table 2.4: Valuation Approach **Specialized property**

Abbreviation

CAMA	Computer Assisted Mass Appraiser
DBE	Development Bank of Ethiopia
EBA	Ethiopian Bankers Association
EPA	Ethiopian Privatization Agency
IAAO	International Association of Assessing Officers
IVSC.....	International Valuation Standards Committee
NPL	Non-Performing Loans
USPAP	Uniform Standards of Professional Appraisal and Practice

Abstract

These days valuation of real property as one of the major aspect of property of the business and becoming the critical practice in investment appraisal in order to achieve sustainable economic development. As many potential factors affect the precision of valuation results and investment appraisal, the valuation method as much as possible should identified, assessed, mitigated and the most suitable approach for the development should be chosen. This is the aim of most institutional and professional valuers' as a starting point in addressing common issues in property valuation/appraisal. The suitability of techniques used in the valuation process is very important for a correct decision on investment appraisal. In this paper, a brief theoretical review covered for the understanding of the subject and conceptual development. To investigate the practice of property valuation in Ethiopian Banks, samples of governmental and non-governmental banks are chosen. The study made using questionnaires prepared to meet the objectives of the paper, which is to provide a brief over view of the methods that used in real property valuation in Ethiopian banks, comparing and contrasting those methods with scientific background. The results of the overall analysis show that various banks use different type of valuation methods depending on the basis prepared by their organization particularly or Ethiopia Bankers Association manuals. The study shows that, the methods adopted by each banks, the purpose of valuation, level of experience and their particular guide lines are some of the factors that cause variation and possible recommendation.

(Key words: Valuation, Real Property, Valuer, Appraisal, Ethiopian Banks)

1. INTRODUCTION

1.1 Background of the Study

The essential nature of any investment is a forgoing of a capital of sum in return for a regular income over a period of time. A person who has a capital surplus to his immediate requirements may retain this for return contingencies. However, a better alternative would be to put his capital to work by investing it and enjoining return of income. The prevalent investor will consider the alternative types of investment available to him by comparing each with the ideal investment. This can be achieve through effective and accurate valuation of properties involved in the investment process.

Valuations are required for many different purposes ranging from open market transaction to compulsory purchase. Purpose for which valuation is being done has a great impact on the value of a property because the value considerably differs with the purpose for which it is required. Valuations are required for a wide range purposes. These range from valuation for purchase and sale, transfer, tax assessment, investment and financing. Hence, the valuation of property is a central tent for all businesses.

The dominating influence of scarce property and increased economic activity in the development of real property had ever-taking global attention. For that reason, there is a need for enhanced approaches to property valuation methods. This base arisen for several reasons. In the first place, large-scale investment in the property sector in recent years has led to more monitoring of investment Situation and Comparison of the price paid for investment with their eventual performance. Secondly, decreasing returns in the sector have led investors, especially institutional investors, to reappraise their investments and the investment criteria used. Thirdly, there is a mood abroad of public awareness akin to consumerism, & this has expressed itself in more attention being paid to the activities of property professionals with specialists in other areas trying to come to terms with the level of property values and attempting to clarify property valuation methods used.

Finally, there is in general more attention being paid to analysis of property transaction and performance from investment analysts, such as stockbrokers and analysts, trying to appraise property investment.

Therefore, property valuation has been identified as a particular importance practice or step to undertake any business related activities of institutions and individuals. Hence, it has already become mandatory to formulate consistent guidelines and standardized national practices to ease investors' decision-making with respect to national investment in developing countries like Ethiopia.

1.2 Statements of the Problem

The result of our observation on the study indicates that performance with regard to effective and accurate property valuation work reveals that, it is inadequate regardless of the understanding of property valuation making use of appropriate methods. In addition to the commonly known property valuation problems like inadequacy of data, absence of using nationally accepted standards, like prepared databases, insufficiency of movement of skill from other country. The following are some of the observations made as main problems in the practice of real property valuation:

- Occurrence of significant discrepancy in valuations made by two or more parties to a particular property. Such problems are frequently observed around banks and resulted in claims and in dissatisfaction of customers (investors).
- Lack of ready-made guidelines that satisfy various conditions or causes of property valuation whenever necessary.
- The absence of qualified professionals is other critical problem. Estimating property valuation of buildings requires possession of good knowledge of planning, designing, construction work, surveying, leveling, quantity surveying and peoples with none of the knowledge are observed practicing valuation of buildings.
- Claims from clients are also problems that arise due to integrated effects of the above problems and in accuracies developed due to faller to adopt computerized data basis.

1.3 Objective of the Study

The main objective of the study focused on the practice of real property valuation in Ethiopia Banks for its applicability, the methods used and the application of valuation techniques. The following specific objectives are set to address the research:

- ✚ Assess and review the practice of methods or techniques of real property valuation in Ethiopian Banks.
- ✚ To assess and identify the problems and difficulties deemed to be a cause of variation that arises in real property valuation of the banks.
- ✚ To recommend on improved property valuation method in Ethiopian Banks.

1.4 Research Questions

The following questions are what the study seeks to address.

- What purpose of property valuation and types of method to value real properties do exist to serve the Bank day-to-day activity?
- Which methods of valuation is suitable for effective real property valuation in Addis Ababa area Banks?
- What are factors affecting real property valuation during estimation in Addis Ababa Banks?
- What is needed to improve in real property in the Banks to mitigate the possible negative impact?

1.5 Scope and limitation

The scope of this study is limited to the practice of property valuation and the techniques or methods adopted by various Ethiopian banks in Addis Ababa. It also attempts to study the purpose or application areas and the types of properties on which valuation is most likely practiced. In addition, the accuracy level and the causes for variation in using various methods of valuation, the consequential impacts of variations on the parties and overall proposed remedial recommendations considered in the study.

Limitations of the study in the acquisition of data and information:

- In availability of written literatures in Ethiopian context
- Inadequacy of the practicing firms on property valuation

- Absence of specialized professionals in the particular area to get further interview
- Lack of worked property valuation results and reports, that they are confidential to the owners/firms
- In all bank the real property valuation manuals are confidential.
- The time constraint in preparing the study is also considerable.

1.6 Organization of the Study

The study is organized with five chapters:

Chapter one contains the general introduction. It provides an over view of property valuation; the practice of property valuation in Ethiopian context, problem identification, objective of the study and scope and limitation of the study.

Chapter two is reviewed the theoretical development for the concept related to property valuation in general and briefly defines valuation and the different valuation methods are discussed with examples.

Chapter three discusses about the materials and method used to prepare the study; it describes the study approach.

Chapter four covers the analysis and Result of the distributed questionnaires and this includes the causes of variation, causes of discrepancy causes of claim among parties involved in valuation and availability of guide lines; and

Final Chapter five provides the conclusion and recommendations based on the results of the analysis.

2. LITERATURE REVIEW

2.1 Definition and Concepts

"Property" means an aggregate of things or rights to things whose possession protected by law. Property has a very wider meaning in its real sense. Property means buildings, vehicles, machineries, and equipments. Property is divided into two broad categories: **Real property** (rights in Land), and **personal property** (other than rights in Land).

"Real property" is an interest in real estate, which is normally recorded, in a formal document, such as a title deed or lease. Therefore, real property is a legal concept distinct from real estate, which represents a physical asset. Real property encompasses all the rights, interests, and benefits related to the owner ship of real estate.

"Real estate" encompasses the land itself, all things naturally occurring on the land, and all things attached below and above the ground to the land by the people, such as buildings and site improvements and permanently attached to the building such as plumbing, heating and cooling systems; electrical wiring; and built-in items like elevators, or lifts are also part of real property.

"Personal property" is defined by exception: property that is not real is personal. Personal property by its nature is not permanently attached. major characteristic of personal property is its movability without damage either to itself or to the real estate to which it is attached (such as: vehicles, machineries and equipments) (IAAO 1990, 76).

"Valuation" can be defined as: "The art, or science, of estimating the value for a specific purpose of a particular interest in a property at a particular moment in time, taking into accountable the features of the property and also considering all the underlying economic factors of the market including the range of alternative investments". Asset valuation is defined as, "The art of estimating the fair monetary measure of the desirability of ownership of specific properties for specific purpose..."(Marston ,1970)

Valuation is based on the valuer's knowledge of market conditions. Valuation of real property is conducted for different purposes namely; expansion works of existing projects, revaluation of its building assets and foreclosing properties of defaulted projects.

"**Valuer's**" means an engineer or technologist or any skilled person employed by the Bank for the purpose of valuation.

2.2 International Practice of property valuation Method

Accomplishing assessment of several property units within a given period (say two years) is a huge task for revenue authorities. The large number of different real property units causes the tax administration to be more complicated. This demands the need for the use of mass appraiser techniques that allow appraisers to get the job done on time and with the available funds. Mass appraisal is the process of valuing large number of properties at the same time using common data, standardized procedures and statistical testing. Mass appraisal requires complete and accurate data, effective valuation models, and proper management of resources. This method focuses on a variety of properties and calculates the averages (market values) on properties with similar characteristics (IAAO, 1990).

In Brazilian

The Brazilian standards **Associagao Brasileira de Normas Tecnicas** (ABNT) have five different bases of value namely:

- Market value
- Value at risk - insurance value
- Asset value
- Forced liquidation value
- Economic value - PV of income associated with an enterprise (investment value).

Market value remains the most commonly used valuation basis but the majority of banks also ask for a forced liquidation value. This liquidation value is normally calculated based on a percentage of the market value (typically 70-80%) or based on a DCF calculation. The DCF calculation takes into account how long the property is likely to take to be absorbed back into the market alongside the associated costs to hold it for that period of time. There is no reference to fair value in the standards, despite Brazil having adopted the International Financial Reporting Standards (IFRS) in 2010.

Brazil is famed for having a regimented and technical methodology, the working of which is detailed within their local valuation standards. The choice of methodology remains at the discretion of the valuer but depends on the nature of the valuation, the purpose of the assessment and the market data available. The methodology to be used is not prescribed in terms of what approach must be used, but rather the standards set the specific parameters that must be adhered to in applying a particular valuation method. Wherever possible the standards prescribe the use of the comparative method using direct market data with associated factor adjustments. These adjustments are detailed in tables within the standards for the valuer to follow, but effectively making a large number of comparables homogeneous rather than identifying those that are most similar to the subject property. It is therefore common for valuers to utilise linear regression modeling software with numerous comparables and detailed factor adjustments when determining market value (RICS, 2014)

In Chinese

Appraisers from a construction background mostly undertook appraisals and therefore they had limited knowledge of market practice and relied on the cost approach. To change this, the Ministry established the real estate code which requires the ‘technical side of valuation’ to form part of the appraisal process.

The real estate appraisal approaches specified in the CIREA standard include:

- Market comparison approach
- Cost approach
- Income approach
- Hypothetical development method (residual)
- Benchmark land price calculation (land datum price method).

The real estate appraisal code requires that appraisers should use at least two or more approaches to appraising the value of real estate. Where figures vary widely amongst the different methods, the appraiser should base the value on his/her expertise and knowledge of the market, providing a rationale and reasoning for the value differences (RICS, 2014).

In United State (US)

The main bases of value referred to in the USPAP standards are as follows:

- Market value
- Investment value
- Liquidation/forced sale value
- Fair value.

However, USPAP does not provide a market value definition per se but instead directs the appraiser to determine the applicable definition. Market value remains the most common basis used in appraisal reports. Some clients, such as banks, also ask for liquidation or forced sale value or insurable value Appraisal Methodology utilized in US Reports

USPAP provides the mechanism to perform quality control and regulation of appraisers but it does not prescribe the actual methods that should be used in the appraisal. Instead it places the emphasis on ensuring the most appropriate methods are chosen and that the decision to choose that method is fully explained in the appraisal report. USPAP previously advocated the use of all three main valuation methods namely sales comparison, income and cost. However, this has since evolved to recognize that the appraiser should exercise professional judgment in deciding which methods are considered, based on their relevance to the property type being appraised.

For example, a major office building will be driven by the income approach and the sales comparison approach will often be included to provide a second check on value, but it would rarely include a cost approach unless specifically asked for. Hence, the decision to exclude one or more method should be explained in the appraisal report. Appraisers, therefore usually comment on all three approaches and then justify the approach adopted or reconcile the value conclusions based on the values determined.

In United Kingdom (UK)

UK valuation methodology although not prescribed or detailed within the Red Book is well established and market driven in terms of utilising the market comparative approach. The five main UK approaches to value include -

- Comparable method - for properties with a number of similar transactions
- Income/investment method - for income producing properties such as offices or shops
- Accounts/profit method - for specialized trading properties

- Residual/development method - for land with development potential
- Contractors/cost method - for properties not normally bought and sold on the open market.

It remains the knowledge and skill of the valuer to select and apply the most appropriate methodology for the property being valued. However, the valuers' job should be to replicate the market approach, in terms of whatever methods are used in practice to best meet the client's terms of engagement. In this regard UK valuers felt there was no need to prescribe methods within the standards as the most important aspect of valuation is to replicate what properties are being transacted at in the market and that the prescription of a particular approach seldom equals market value. There was also a feeling from valuers that this can lead to mis-valuing either in terms of incorrect inputs into software driven models or through valuers failing to grasp the fundamentals that underpin the valuation in the first place(RICS, 2014)

The International Valuation Standard (IVS) is recognized as the key international valuation standard that applies in many countries and often acts as the basis or foundation for all appraisal activity. Similarly, at a local level there often exists a further tier of standards which can operational the international standards in terms of content and practical influence.

This broad complementarities between the two tiers of valuation standards was often cited by research participants. Their view was that international standards provide the underpinning valuation principles to be followed whereas the local standards add to these principles through illustrating practical application. The linkage between theory and practice is further articulated depending on the relative maturity of the market and the extent to which an open and transparent real estate market exists. In this regard, Countries favor a more detailed local standard, which is prescriptive in advising the valuer/appraiser on what they should do but contains less detail on the engagement process, ethics or valuer responsibilities. This latter element enables the broad complementarities between the local and international standards as the IVS provides a detailed overview of the scope of work, terms of engagement and broad ethical arrangements. The local standards within these emerging markets on the other hand can continue to focus on the valuation process, report structure and articulation of the valuation methods.

2.3 Property Valuation Practice In Ethiopia

These days the development of valuation/ appraisal has reached higher level at which it is assumed as “emerging global profession.” This suggests that there is upcoming process of worldwide integration of professional valuation and appraisal practice. Such development is linked directly with economic development of countries and civilization of nations. Similarly, professional societies and associations, political and economic relations of countries have a great role in enhancing the practice and professional competence of valuer’s.

With the succession of former command economic changing to market economies in Ethiopia, property issues have been thrown in to prominence. Money governmental enterprises are being privatized with the support of legislation concerning rights of owner ship, leasehold etc. Mortgage systems are gradually being built up to make real property sector but also to support the general economy through credit multiplication effects based on increase of mortgages. As a result, a need for valuation increased.

Until the sustainable existence of Ethiopian market economy, the practice of property valuation in Ethiopia was experienced by governmental body. So that, since there was no a practice of property valuation under taken certified native professional association, the Ethiopian privatization agency(EPA) was forced to look foreigners for valuation propose during the transfer of the governmental enterprises to private share companies. For instance, survey and valuation manual for valuation of fixed assets of public enterprises was prepared as a guide to assist valuers of public enterprises in Ethiopia for the EPA by foreigners, where Ernest and young was the lead consultant and CB Richard Ellis were required to supervise the valuation process. Through time many companies and individuals has shown vested interest in practicing valuation, and it seems that the effort is promising to bear fruits by establishing valuation profession and enhancing professional competence of valuers in Ethiopia.

2.4 Purpose of Real Property Valuations

As previously stated property, valuation is applicable for various purposes. The valuer’s special expertise, however, is to assess the capital or rental value of any particular property at a certain time. The valuer will need to know the purpose for which the valuation is required and the intentions and circumstances of the client or employer on whose behalf it is being prepared. This

information is essential because it will affect the calculation of the value. The Valuation is done for the following purposes; (Millington,2000)

- i. **Sale report:** the common purpose for requesting a valuation is for sale. Although, this is often referred to as a valuation, it is actually more similar to marketing advice as normally the estimate of price is given for a future date after the property has been fully marketed. Conversely, a valuation for purchase is by its nature, an estimate of the individual's best bid and thus is a calculation of worth.
- ii. **Accounting purpose:** a more correct use of the term valuation is the value of property as reported in company (or public) accounts. The majority of property owners have to prepare valuation of their properties for the purpose of their accounts. Is a statement of the company's wealth on a particular date. Thus, the value of the property element with in the business is an estimate of the market value on the date of the accounts.
- iii. **Loan security:** banks and other lenders commission the valuation of property acting as collateral for a loan. They want a market value on which they can judge the amount of the loan based on "loan to value" ratio. They are attempting to manage the risk of the loan by ensuring that the property has sufficient value to act as security for the amount lent.
- iv. **Minimum price or auction reserve:** often when a company or public body is selling its assets by tender or auction, they are obliged only accept offers in excess of their valuation of the asset. Thus, a market value has to be determined as a guide. Similarly, in cases where an owner has a property that is unusual or where there are special circumstances pertaining to it, the valuer may be instructed to place a reserve value on the property for auction.
- v. **Insurance:** all property must be insured in the case of replacement but this is unconnected to the sale price which of course incubuses the land. For insurance purpose the normal bases of valuation adopted will be the cost of replacing the building in the event of destruction or partial destruction.
- vi. **Taxation:** value's frequently have to value property for tax purposes. The principal taxes fall in to the groups: capital and revenue. Often these valuations are formula based and diverge form normal market value calculations.

- vii. **Acquisition:** sometimes a property is compulsorily acquired by the government. Suitable amount as compensation shall have to be paid to the owner, for which valuation of a property has to be carried out.

2.5 Principle of Valuation

When resorting to valuation of any property, a valuer must be expert in the trade. The valuer's must have sound knowledge in planning and construction of property. They should also be quite aware of administrative laws like town planning laws, rent restriction act, local tax etc. Valuer being up to date with market rates, rate of interest together with experience and capability in economic analysis, if money will take him to exactness in arriving at the fair price of a property. (Marston,1970)

Following principles should be observed at the time of evaluating a fair and reasonable value of Real property:

- i. Cost depends upon supply and demand of the property.
- ii. Cost depends upon its design, specifications of the materials used and its location.
- iii. Cost varies with the purpose for which valuation is to be done.
- iv. Cost is affected by the age of the property and its physical conditions.
- v. In valuation, a vender must be willing to sell as also the purchaser willing to purchase. There should be no compulsion on either of them so as to decide honest value of the property. Similarly, there should be no urgency or compulsion on the purchaser of seller. No reduction or increase in cost should be done on these accounts.
- vi. Present and future use of any property should be given due weightage in valuation.
- vii. Cost analysis must be based on statistical data as may sometime require evidence in a court of law.

2.6 The Valuer

A valuer is an expert in his profession. Valuer's has to work out the market value of the property depending upon economic analysis of all types of the property. Valuer is usually to attend the court to give his expert advice about the market value of the property. Hence it is necessary that the valuation should base on facts and figures. Valuer must know what factors are required to be considered, what information to be collect and from where. Valuer should neither value the

property at a higher rate to please the client nor on the lower side to escape oneself from wealth tax and stamp duty etc. Thus a valuer must have full knowledge having thorough understanding of the principles of the subject; for reaching judgment, possess habit of observation and analytical bent of mind.

In order to be a good valuer, valuer must possess good knowledge on: Planning, designing and construction works, Surveying and leveling, Quantity surveying and estimating, Building by the laws of locality, Law of easements, Rent and Restriction Act, Arbitration, Law of contracts, Local and governmental taxation, Fire insurance, Rate of market interest and rate of interest on gilt edged securities, Present market rate of land other items concerning valuation of property.

2.7 Depreciation

It is defined as the gradual decrease or loss in the value of a property because of constant wear, tear and decay etc. There is a distinction in the concept of depreciation between valuers and accountants. Both forms of depreciation produce an estimate of loss. Accountants begin with original costs and values with reproduction or replacement costs as of the date or the valuation. Another important difference is that accountants use physical life and valuers use economic life. A long physical life does not mean a long economical life. An asset is satisfactory physical condition may need to be replaced because the cost to maintain it in good operating condition is excessive, or because new technology makes it obsolete and not economical in the current market. In accounting, depreciation is a mathematical procedure for recovering the original cost overtime. Depreciation is charged as an expense against income and becomes a part of the product or service. In valuation depreciation is the actual loss in value or worth of a property in value or worth of a property item from age and obsolescence.

Valuation depreciation falls in to three main categories. Physical, functional and external or economical. The rate of depreciation depends upon the longevity of utility period, neglect of maintenance etc. or a property. For building constructed with standard materials the utility period is taken up to 60 years. Depreciation rate can be calculated by a number of methods but the following methods are simple to use and give fair results.

$$D = A/UL \quad \text{Where, } D = \text{Depreciation}$$

A = Effective age

UL = Total useful or economic life

Determination of depreciation as per life of building.

Generally, for the first 5 to 10 years, there is hardly any depreciation of a Building but the rate of depreciation increase with age. Thereafter, , if a building is properly maintained, it may have the following depreciation rates considering the life of the building within 60 years.

Period	Depreciation per Year	Total Depreciation
For 1st five years (0 to 5 years)	nil	nil
For next five years (5 to 10 years)	@ ½ % per year	2.5 %
For next 10 years (10 to 20 years)	@ ¾ % per year	7.5 %
For next 20 years (20 to 40 years)	@ 1 % per year	20 %
For next 40 years (40 to 60 years)	@ 1 ½ % per year	60 %
	Total	90 %

Beyond this period, the balance 10 % value of the property is taken as scrap value at the end of utility period (Principles of Valuation, 1981)

2.8 Mortgage

Lending of money against the security of property has its origin since time immemorial. Man borrowing money is required to pay interest to the party advancing the loan at the rate decided between them. The advancement of money is about 50 % of the present value of the property for which a valuation has to be prepared by the mortgagee or his valuer in order to ascertain himself that he may not advance money more than the value of the property. Also to keep sufficient margin between the value of the property and the loan so as to cover the loss of value due to depreciation and interest the loss of value due to depreciation and interest charges on the loan. If the interest is not paid for number of years, as per conditions of the mortgage deed, the mortgagee may sell the property to recover his loan and interest. The surplus if any is paid to the lender.

Thus the person borrowing is known as mortgagor and the party or the financial institution advancing loan is known as mortgagee. The relevant document for the mortgage transaction is called mortgage deed. When the loan and the interest is fully paid the mortgagor has got the right to free his property from the mortgage. This is known as **equity of salvation**.

2.9 Methods of Property Valuation

Valuations of land and property are usually undertaken by the valuation surveyor for a variety of different purposes. The purpose of the valuation will affect the assessment or its value, and this may differ because of the assumptions made and also because they are only estimates of value any way.

Market value is the estimated amount for which a property should exchange on the date of valuation between a willing buyer and willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion. The concept of market value reflects the collective perceptions and actions of a market and is the basis of valuing most resources in market-based economies.

Market-based valuations are developed from data specific to the appropriate markets and through methods and procedures that try to reflect the deductive process of participants in those markets. There are number of alternative methods can be used to estimate either the **capital value** or **rental value** of an interest on **land** or **property**.

2.9.1 Income Capitalization/rental Approach

It is the process of estimating the value of an income-producing property by capitalization of the annual net operating income expected to be produced by the property during its remaining economic life. Capitalization relates income and a defined value type by converting an income amount in to a value estimate. The process considers direct relationships, yield or discount rates applied to a series of incomes over a projected period, or both. The income approach reflects the principle of substitution and anticipation.

In another words, the income capitalization approach is based on the net income, specifically net operating income, or investment return that a buyer expects from the property. The price that the buyer will pay will be determined by the probable return the property will yield from the investment and can be shown by the following formula(DBE,2014)

$$\frac{\text{Net Operating Income}}{\text{Return (capitalization rate)}} = \text{Property Value} \dots\dots\dots \text{Equation 2.1}$$

2.9.2 Sales Comparison Approach

The sales comparison method is one of the more accurate methods of estimating market value. This method involves comparing the property being appraised to similar properties that have recently sold and reflects the actions of buyers and sellers in the real estate market. A buyer or seller usually examines other available properties before negotiating a final purchase price. To use the sales comparison method to estimate market value, the assessor must have information about an adequate number of properties that have recently sold. The properties must be reasonably similar in physical characteristics and location. The county director of tax equalization can help the assessor obtain information about sales transactions from Statements of Real Estate Full Consideration completed for the sales ratio study. The assessor is cautioned to comply with the secrecy provisions which require that the names of the grantee (buyer) and grantor (seller) be kept confidential (*Cory Fong, 2011*)

$$\text{Sales Price of Comparable Property} \pm \text{Adjustments} = \text{Indicated Value of Subject Property} \dots\dots \text{Eq. 2.2}$$

2.9.3 Cost Approach

Cost approach is the process of estimating the value of a property by adding the appraiser's estimate of the reproduction (the Birr amount required to construct an exact duplicate of improvements to the subject property) or replacement cost (the Birr amount required to construct improvements of equal utility using current construction methods and materials) of property improvements (can be termed also as Replacement Cost New), less accrued depreciation, to the estimated land value.

This approach is to be use when a value estimate via either the income capitalization approach or the sales comparison approach is not possible because of data problem. In cost approach, quantifying Deprecation to reach at Depreciated Replacement Cost or Depreciated Reproduction Cost is the most paramount and important step.

$$(\text{RCN} - \text{D}) + \text{LV} = \text{V} \dots\dots\dots \text{Equation 2.3}$$

Where: RCN = Replacement/Reproduction Cost New of the Improvements

D = Accrued Depreciation

LV = Land Value, as if vacant V = Total Property Value

However, of the three generally accepted valuation approaches to market value; the cost approach for valuation of properties for the reason that, it is the cost approach method which is more suitable to estimate specialized properties such as industrial complexes of specialized nature, farm developments (DBE, 2014).

Specialized properties: - Are those properties rarely if ever sold on the open market, except by way of sale of the business of which they are part of, due to their uniqueness, which may arise from the specialized nature and design of the buildings, their configuration, size or location.

Characteristics of specialized properties:

- Are useful to a limited number of uses or users;
- Are rarely, if ever, sold on the open market, except as part of the business entity
- Have generally specialized structures; and
- Earn revenue that has not been derived from an open market and for which market based evidence does not exist.

In general, specialized properties are those properties having specialized physical or geographical factor, offer very little utility for any purpose other than that for which they were originally designed. These classes of properties are so specialized by nature that no comparable market data could be employed to apply the income approach; hence, the final market value will fully rely on the results of the cost approach.

In applying cost approach, buildings are first categorized according to their purposes, height, materials of construction and size. Then each category is further classified into grades based on the quality of materials used for the construction. For the analysis of cost of construction complete and approved structural, architectural, electrical, sanitary and other designs of representative buildings are collected and bill of quantity is prepared using currently updated unit price manual, finally the unit cost per m² and/or per m³ is determined by dividing the estimated cost of the construction of the building into the building's plinth area or volume.

In general, specialized properties are those properties having specialized physical or geographical factor, offer very little utility for any purpose other than that for which they were originally designed. These classes of properties are so specialized by nature that no comparable

market data could be employed to apply the income approach; hence, the final market value will fully rely on the results of the cost approach.

In applying cost approach, buildings are first categorized according to their purposes, height, materials of construction and size. Then each category is further classified into grades based on the quality of materials used for the construction. For the analysis of cost of construction complete and approved structural, architectural, electrical, sanitary and other designs of representative buildings are collected and bill of quantity is prepared using currently updated unit price manual, finally the unit cost per m² and/or per m³ is determined by dividing the estimated cost of the construction of the building into the building's plinth area or volume(DBE,2014).

2.9.4 The profit or Accounting Method

The profit or accounting method is applicable to Hotels, Cinema Theatres, shops and Public Places. This method as the name suggests deals in working the profit from a property and subsequently capitalizing the same at appropriate rate of return depending upon a number of factors (Principles of Valuation,1981)

- The net profit to be adopted should be an average of last three years of profit.
- Part of the profits is due to goodwill which should be properly reflected in the rate of return.

The usual approach is to estimate the gross earnings, deduct expenses and the balance remaining then represents the amount available for payment or rents. This can then be converted into a capital sum.

2.9.5 The Residual Method

The residual method is used in those circumstances where the value of a property can be increased after carrying out development work. For example, an old house may have the potential and ability for conversion into flats, when its best potential can be realized. The building is valued on the basis of its future worth after conversion, and the costs of this work together with developer's costs are then deducted. The resulting sum is the value of the property in its original state and is known as its residual value (Principles of Valuation,1981)

2.9.6 The Investment Method

The investment method can be used in those circumstances where the property produces an income. The income expected must be comparable with that which could be earned by investing the capital elsewhere. In considering alternative investment possibilities factors such as security values, ease of realization, costs of purchase and selling, and any tax liability will influence competing proposals. The principal investors are pension funds, insurance companies, property companies, historic owners, local authorities and governmental agencies.

2.9.7 The Reinstatement Method

The reinstatement method requires the estimation of the cost of rebuilding a particular property and then adding to it the value of the land on which property stands. It is a useful method for fire insurance purposes, in order to calculate the premium to be paid. It may sometimes appear that the insurance premium should only be based upon rebuilding costs, since the site will remain even in the event of a fire. It will be necessary, however, to allow for demolition and site clearance costs where the building is to be rebuilt. These costs will also have to take into account possible site damage and temporary works that might be necessary before demolition can commence.

Each of the above methods other than the profit method is useful for estimating capital values, whereas the residual method and investment method are not really suitable for the determination of rental value. The demand for a particular type of landed property will be influenced by changes in the size of population, methods of communication, standards of living and society in general. In any valuation exercise, will require collection of relevant documents and carrying out property survey (Principles of Valuation,1981)

2.10 Choice of Method of Property Valuation

The valuer has the choice of a number of methods and the method used will be a reflection of the available information in the market place. Generally, the less information, in the case of comparable sales, the more the valuer will incline to use a method that reflects the role of property as the asset to the business. These types of property tend to be referred to as **specialized property**. Conversely, where there is a lot of comparable transaction data (either in the form of capital value and/or rents/yields) then the valuer will value with reference to the original thought

process of the occupier. They take "second hand" information from comparable and interpret this information with in the context of the current market to estimate the price of the subject property. This is used for **non-specialized properties**. (i.e. property types of residential, offices, shops industrial units, and warehousing). These will be valued by either the **investment or comparative methods or**, in some markets, **by the replacement cost approach**.

Table 2.1 Summary: Types of property and its Valuation Method (Principles of Valuation,1981)

Type of property	Method of valuation
Residential, offices, shops, industrial unit and warehousing.(non-specialized property).	Investment/ comparative methods, in some markets by replacement cost method approach.
Agricultural land, telecommunications, land fill, cinemas and theatres, hotels, care/nursing homes (private), private hospitals, petrol stations, woodland.	Cost method, Accounts or profits method.
Mineral extraction.	Accounts or profits, residual approach.
Bars, restaurants, leisure properties (private).	Comparative or investment method, accounts or profits method.
Casinos and clubs	Profits method
Leisure properties (public), care/nursing homes (public), public hospitals, churches and mosques.	Cost method
Development property	Profits method, residual method.

Similarly, whilst some valuations are carried out against the backdrop of a statutory or legal frame work. For example, properties being acquired by compulsory purchase will be valued in accordance with acquisition laws in the country, yet the valuation methods underpinning them will not differ simply because the acquisition is compulsory. Likewise, with valuations for taxation. The general principle is that a property is either specialized or non-specialized regardless of the reason for the valuation. It is the property that determines method, not the purpose of the valuation.

The assumption with all values of specialized buildings is that they are to be valued on the assumption that the existing use of the building will continue. On this basis, there are a number of assets that could be described as specialized.

2.11 Overview of Ethiopian Banks Practices of Property valuation

The expectation of operational units to perform valuation in values of properties secured to loan as collateral, value foreclosed properties of defaulted borrowers, revaluation of its building assets and expansion works of buildings financed by the bank.

Property valuation practice in Ethiopian banks, most of the banks developed their manuals which is to be up dated every year and some of the banks used nationally developed EBA's Manual. The manuals deals with valuation of buildings and other associated civil works including consideration of consultancy fee and the amount paid in advance and interim payment/s for the plot of land held on lease.

In case of Development Bank of Ethiopia (DBE) most of the projects that finances are specialized in nature, they are to produce specific product and cannot easily be exchanged in the market in case they fail, hence, it entails both over estimation and under estimation issue which needs careful and proper estimation and particular Development Bank has its own valuation manual.

According to EBA Manual,(2015).The aims of EBA's Manual to endeavor of minimizing variations observed on valuation procedures employed by member banks and thereby avoid and or curtail differences in estimated values of properties pledged as collateral. It will also be a step forward towards aligning the Banks' valuation methods inline with generally accepted valuation techniques.

From our current review and previous knowledge of the Banks' working procedures, that valuations methodologies employed by almost all Banks is similar except the figurative elements and some minor differences inherent in each.

In the valuation methods used by many of the Banks, the depreciated (or un-depreciated) replacement cost of development on the premises to be held as collateral are calculated and multiplied with some kind of appreciation factor/s or some sort of location value is added to

determine the estimated value of the property. For developments under construction requesting project finance, most of the Banks employ an engineering cost estimation using the specification and bill of quantities method.

Such methodologies are grossly employed without consideration of the type of property to be valued. Moreover, the property market data used in the valuations are observed to have not been kept up-to-date due to lack of required personnel or other capacity related problems. In undeveloped markets, one such as our country's, where reliable and compiled transactional market data are almost unavailable, application of three valuation methodologies (Cost, Income and Direct Comparison) is understandably very difficult. However, value estimation should be based on selection of one or more of the three valuation methodologies that will best suit the type of property under consideration.

The valuation reports produced by such procedures also lack the basic analysis and disclosure of risks associated with the property. Except in very rare cases, reports do not address such issues as: town planning considerations, permitted use of plots, legal issues associated with title, obsolescence and marketability and stability in the estimated value, which are very essential in the assessments of risks associated with properties to be attached as collateral.

The proper method to be employed in the determination of the value of a property will depend mainly on the purpose of the assignment, the type of value sought, the type of property under consideration, and the type and reliability of available comparable market data.

In accordance with EBA's Real Property Valuation Standard and The International Valuation Standards 2007, Valuations for loan security shall be based on market value. Due to the constraint on availability of reliable transactional market data in the City, infancy of property market in the Country and difficulty of consistency in EBA's appraisal applications, only the Cost Approach and Income Approach will be employed in the valuation of major class of properties. An income approach is based on the income which the property is generating at the time of valuation, while a cost approach is based on the total cost of the construction of a property (EBA's Manual ,2015).

2.12 Property Class

Determination of the market value of a specific property will require full application of the two approaches to determine an indicative of value and a final reconciliation through a weighted average method to reach to the final market value estimate for the bank.

Weights assigned for indicative values resulting from each approach will require analysis of the following factors: the inherent strength of each approach to the specific property class, relevance of each approach to the subject property and the amount and reliability of data to be employed in the application of each approach.

Properties are generally classified in to three major classes, namely: Commercial /Investment Property, Residential Property and Specialized Property.

2.12.1 Commercial /Investment Properties

These class of properties are developed and owned for the purpose of leasing to a third party, for possible future occupation by the owner, or for future development to earn rental income or profit upon resale. A prospective Investor on commercial property will mainly be interested in the income producing capacity of the property.

The assignment of weight in the final reconciliation of market value indicatives resulting from the application of the Cost & Income Approaches will be as follows:

Table 2.2 : Valuation Approach **Commercial /Investment property**

No.	CORRELATION FACTOR	Factor weight (100%)	ASSIGNED WEIGHT	
			Cost approach	Income approach
1	Strength of approach to value	40	35	65
2	Relevance of approaches to subject property	30	40	60
3	Amount and reliability of data for each approach	30	45	55
	Total	100	40%	60%
	Value indicative using cost approach		XXXX	
	Value indicative using income approach			YYYYY
	Final Reconciled Market Value of the property		0.4(xxxx) + 0.6(yyyyy)	

2.12.2 Residential Properties

Are those which are mainly developed for residential purposes, whether they are owner occupied or rented out. A prospective buyer will mainly consider suitability of the premises for satisfying the required needs rather than contemplating on the expected yield from investing on the property.

Accordingly, one has to assign more weight on the cost approach value indicative than the income approach indicative, the detail specifics of which are depicted in the table below:

Table 2.3 : Valuation Approach **Residential property**

No.	Correlation Factor	Factor weight (100%)	Assigned Weight	
			Cost approach	Income approach
1	Strength of approach to value	40	85	15
2	Relevance of approaches to subject property	30	80	20
3	Amount and reliability of data for each approach	30	74	26
	Total	100	80%	20%
	Value indicative using cost approach		XXXX	
	Value indicative using income approach			YYYYY
	Final Reconciled Market Value of the property		8*(XXXX) +.2*(YYYY)	

2.12.3 Specialized Properties

These class of properties are those that are rarely if ever sold on the open market, except by way of a sale of the business of which they are part of, due to their uniqueness, which may arise from the specialized nature and design of the buildings, their configuration, size or location or other factors.

Key characteristics of specialized property are that they:

- Are useful to a limited number of uses or users;
- Are rarely, if ever, sold on the open market, except as part of the business entity;
- Have generally specialized structures; and
- Earn revenue that has not been derived from an open market and for which market based evidence does not exist.

In general, specialized properties are those that, due to some specialized physical or geographical factor, offer very little utility for any purpose other than that for which they were originally designed.

These class of properties are so specialized by nature that no comparable market data could be employed to apply the Income Approach, as tabulated below. Hence, the final market value conclusion will fully rely on the results of the Cost Approach.

Table 2.4: Valuation Approach **Specialized property**

No	CORRELATION FACTOR	Factor weight (100%)	ASSIGNED WEIGHT	
			Cost approach	Income approach
1	Strength of approach to value	40	100	0
2	Relevance of approaches to subject property	30	100	0
3	Amount and reliability of data for each approach	30	100	0
	Total	100	100%	0%
	Value indicative using cost approach		XXXX	
	Value indicative using income approach			YYYY
	Final Reconciled Market Value of the property		XXXXX	

Specialized property: the type of property that would be referred to as a specialized are those properties where there is insufficient market data to value them by some form of comparison.

Non-specialized property: the type of property that would be referred to as non- specialized are the dominant property types of residential, offices, shops, industrial units and ware housing.

3. MATERIALS AND METHODS

3.1 Approach of the Study

The starting action of the study was to search for and study of literature related to real property valuation in general. The study included reference books, internet pages and valuation procedure manual for the valuation of real property of the Ethiopian banks. The study also included looking at real property valuation techniques of some of banks for the purpose of the literature review, and gathering of the necessary information. Principles and criteria were chosen from different sources as best practices as much as possible for benchmarking the practice of property valuation in Ethiopia banks.

3.2 Data Collection

Data for the study was collected using both primary and secondary sources. The primary data was obtained through interview made and questionnaire directed for all bank engineers(valuers') that are involved in real property valuation. The secondary data was obtained from the internet, journals, books and different published documents. The secondary data was used to get an insight of the problem and was used as criteria for developing and analyzing the primary data.

The study was both qualitative in nature. Some of the data collected was in descriptive form while some of the data was in numeric form. The study is an observational descriptive research i.e. it involves observing the situation as it is without getting involved and changing things.

3.3 Sample Size of the Study

There are 18 governmental and private banks practicing real property valuation are chosen. Most of them are frequently engaged by real property valuation (land and building). However, those banks are mainly located in the capital; some of them have national coverage of real property valuation practice applicable in the same basis for all areas. Such organizational divergence has helped the study to have a touch with national wide practice.

The study will have undertaken by analysis of the distributed questionnaires for all banks, which are chosen as an instrument to collect information from the valuers'. The analysis and discussion of the results will be conduct. The study results will identify the shortcomings with the practices

and the contribution of this work, recommendations forward on the necessary improvement of future practice of real property valuation.

3.4 Questionnaire Design

The questionnaire designed for this study includes both the open and closed ended forms of questions. In the open ended part of the questionnaire respondents were asked to express their opinion or to reply in whatever content they like for the questions asked, concerning the different property valuation issues mentioned in this paper. In the closed ended part of the questionnaire the respondents were asked simply to show their level of agreement on the statements outlined.

4. RESULTS AND DISCUSSIONS

4.1 Assess and review the practice of methods or technique of real property valuation in Ethiopian Banks

As discussed in the literature review of this study in chapter three, the purpose of the valuation will affect the assessment or its value, and this may differ because of the assumptions made also because they are only estimates of value anyway.

Out of the distributed questionnaires to Banks Engineers, the type of property valuation technique mostly used is cost approach method it takes the lion share and some of them uses income capitalization approach method. As witnessed from the same, the Banking industry is used cost approach method, and it protects the banking industry from risks related with revenue and profit. In the same token, most of the real property estimated by the Banks as collateral are office, commercial, industrial, and hotel building except land to support the banks activity. Besides, the trend of the number of collateralized real property has been increasing trend in the past five years for both private and government Banks.

As described by the respondents are work on different bank for estimate real property and its good valuers which got exposure and upgrade its expertise for the same. The main purpose of real property valuation emanated for collateral, foreclosure and Mortgage & Security Loan in order to secure loan from the Banks.

The practice of real property valuation is emphasis to lend money rather than other purposes such as tax assessment, rental purpose and asset acquisition & merger. So, the purpose of the real property valuation is narrow span of practice and need improvement from stockholder to cope up asset valuation. Moreover, most banks have a property valuation guideline to valuate properties in line with its procedures and there is own common ground rule and bench mark that all banks used. Hence, the operation smooth and reduces biasness and helps the banks for easy amendment and promotes flexibility. On the other hand, Some of the banks use Nationally prepared Manual like Ethiopian Bankers Association(EBA's) manual and hence, it is not fair to value up to date valuation of property.

With common understanding all Banks will have an independent regulatory body/ independent consultant during valuation process in order to create reliable valuation results by pinpoint the

followings;

- Looking at the methods
- Documenting, consistency with the valuation guide lines
- Checking arithmetic errors
- Facilitating the process
- Making a fair value of valuated real property

4.2 To Asses And Identify The Problems And Difficulties Deemed To Be A Cause of Variation That Arises In Real Property Valuation Of The Banks

In the real world there are many circumstances at which a particular property is subjected to different valuation processes. It deemed to cause of great variation on valuation results is commonly observable.

As we mentioned earlier, most of technique for valuation of real property is cost and income approaches. The Bank has been valuing its property exist discrepancy occurred using two or more methods. The outcome of estimation leads mismatch between the Banks estimation value with the anticipation of the client and arise complain for the client. On the contrary, some of the respondents, there is no discrepancy during using two/more methods to estimate real property and indicated that better to use cost approach to minimize the risk of the Banks.

As we compared to both private and government banks, according to this study 61% of the valutors have experience to see a real property valuated by two or more banks under the same condition. Among these valutors 61% of them confirmed the occurrence of variation on the end results. As stated by the respondents the main causes of the discrepancy are:

- The methods used by the valutors. i.e. every valuation has its own interest to be satisfied, so that it rely on the method that best fits his intention.
- The purpose for which valuation is carried out.
- Lack of experience /professional competence.
- The guide line they used for valuation.

In the same token, the variation of real property valuation in Ethiopian Banks was practice and far from the current market price of real property for the following reasons and the problems will have shared across the Banks.

- Use out dated guideline of real property valuation manual
- Method to employed for Real Property valuation
- Purpose of the valuation
- Lack of experience of valuator

As a result of variation during property estimation faced possible impact for both side of Bank and Clients. Even if the client has demanded higher estimation of property in order to get increase lending money as well as affect its reputation for those Banks. Hence, during overestimation it implies that increase risk, increase Non performing loans (NPLS) for the side but the client is decrease the equity contribution in the case of project investment, and to get high amount of loan amount its depend on the value of the property.

According to the variation, the claim is expected to come up with the market value of the property in the sense of fairness in the client point of view. On the top of this, it needs uniform standard of valuation mechanism and practice to address the client claims. As per the respondent, the main reason for every customer need overestimation to get better benefit or high amount of credit which is a negative impact for the Bank and increase vulnerable to risk.

Finally, all banks have suggested the following points as a remedial major to minimize variation in real property valuation.

- Preparation of standard guideline in national level
- Preparing data base
- Studying more on real property valuation
- Establishing a real property valuation firm at governmental level.
- Establishing regulatory body that consults and controls the real property valuation.
- Taking good assessment of the real property and data collection.
- Preparing special training on real property valuation for firms
- Understanding and summarization of the methodology before valuation.

From the discussion presented above firms understudy are lacking many things in their activity of valuation. In the first place due to unavailability of qualified professional in the field of property valuation there is no prepared nationally accepted standard guide line on which the firms can drive their own guide line to minimize subjectivity in valuation, so that variations can

be minimized.

4.3 To Recommend On Improved Property Valuation Method In Ethiopian Banks

According to the respondents, most of the Banks could not accept the consultant/supervisor to support the Banks activity to improve the variation and also emphasis to use its own valuer for valuation of real property to minimize the risk of the Banks and subjectivity of the professional. Besides, the consultant participation in the Banks valuation to reconcile valuation of the Banks and its involvement is very limited. Obviously, the consultant is valuated real property in line with fairness and taking in to current market price of the property and the Banks supervisors are assessed the valuation is done in line with policy and guideline of the banks manual and work on minimize the complain, increase work quality, and avoid its risk.

As per the respondents, the Banks are not sure about the improvement of real property valuation now a days but some of them say that there is improvement and the cause of the improvement is;

- Growth of economic activity in the country
- Growth of private business makers or developers
- Insufficient work towards learning and growth of valuer
- Change on the governmental policy

In order to minimize the shortcoming of real property valuation and most of the Banks respondents are recommend the following points:

- Updating the real property manual and reliable market data within reasonable time.
- The valuation should be done in team basis and use one types of valuation Methodology
- Develop clear procedure must have prepared to minimize subjectivity
- Implementing different method has to be applied for valuation
- Conducting real property valuation training must be given to cope up the valuer capacity
- The Banking Industry should develop national standard of valuation methods across the country

5. SUMMARY AND CONCLUSION

5.1 Conclusion

Both government and Private Banks has used two type of property valuation technique are cost approach method and income capitalization approach method. The result advocates the industry used cost approach method and it protects the banking industry from risks related should sustain its business. Besides, In all bank valuation made for the purpose of collateral and foreclosure as well as Mortgage & Security Loan in line with its own guideline and hence the Banking industry service is limited so as to utilize the real property valuation.

Out of the real property most of the Banks has estimated for office, commercial, industrial, and hotel building to provide service for the clients and the valuation activity is increasing trend during past five years. On top of this, discrepancy has occurred during using two or more methods and leads incongruity between the Banks estimation value compared with client expectation and the complaint should raise on the methods of valuation employees far from market price of real property.

Currently some improvement developed in the practice of real property valuation in the country but it need better effort to address the gap of valuer skill and knowledge. To minimize the risk of the Banks, create satisfaction through updating the real property manual and reliable market data, conducting valuation in team basis and develop uniform valuation Methodology, construct a clear procedure of valuation to minimize subjectivity, undertaking real property valuation training to the valuer and applying different computerized valuation Standards across the Banks.

5.2 Recommendation

This paper is believed to guide the banks that are involved in the property valuation in having mutual understanding concerning valuation process. Based on the results of the study, the following recommendations are forwarded to enhance (improve) the practice real property valuation in Ethiopian banks-Addis Ababa.

1. Presence of standard procedures and guide lines, knowing for what type of real property a valuation technique to be used and the purpose of the valuation, and sufficient data on valuation, decreases discrepancy which occurs by using two or more methods.
2. An independent consultant or supervisor improves the valuation result. So, if consulting or supervisory firm is established for valuation purpose, it will be mutually benefited.
3. It is possible to minimize variation in property valuation by practicing the following:
 - By preparing special training on property valuation
 - By taking good assessment of real properties.
 - Updating the real property manual and reliable market data timely.
 - By having a good knowledge of property valuation
 - By establishing real property valuation firm on governmental or private level in the country at national basis.
 - By preparing database on sale, rent, construction materials cost, lease values and all other relevant information and made available to all concerned valuation manual developer.
 - Preparing a countrywide standard for valuation of different real properties based on some specification.
 - Software documentation should be included in the guide line if the cost is performed by a computer- assisted mass appraisal system. And establishing Computerized valuation Standards across the Banks.
 - Develop a system has address the variation on value of the property occurs in different Bank as well as alleviate subjectivity and minimize the risk of the Banks and also reduce complain of the clients.

6. REFERENCE

- Almy, R. 2014. *Valuation and Assessment of Immovable Property*. OECD Working Papers on Fiscal Federalism, No. 19, OECD Publishing, Paris.
- CB Richard Ellis. 2004. *Survey And Valuation Procedure Manual For The Valuation Of Fixed Assets For The Ethiopian Privatization Agency*. Ethiopia.
- Cory Fong 2011. *Guideline Property Tax Valuation Concepts - Residential and Commercial Property*. North Dakota.
- Crano and Brewer.1986. *Principles and Methods of Social Research*.
- Development Bank of Ethiopia 2014. *Real Property Valuation manual*. Ethiopia.
- Falls & Haas. R.C.G.. Tighe, 2004. *A Comparison of Asset Valuation Methods for Civil Infrastructure*.
- International Association of Assessing Officers(IAAO). 2005. *Standard on Valuation of Personal Property*. Kansas City, USA.
- _____.2013. *Standard on mass appraisal*.
- <http://www.iaao.org/uploads/StandardOnMassAppraisal.pdf> (accessed 12 April 2013).. Kansas City, USA
- _____. 1990. *Property Appraisal and Assessment Administration*
- _____. 1977. *Property Assessment Valuation*
- International Valuation Standards Committee(IVSC). 2007. *International Valuation Guidance Note 1*.
- _____. 2003. *International Valuation Standards*2003. IVSC 6th ed. London.
- Kenneth S. Bordens, Bruce B. Abbott. 2008. *Research Design and Methods-A Process Approach*. 8th ed. Indiana University
- Mary Alice Hines.2001. *Investing in International Real Estate*. westport, connecticut. London.
- Marston. 1970. *A Comparison of Asset Valuation methods for civil Infrastructure*. Michigan.

M. Chakraborti. 2003. *Estimation, costing, specification & valuation in civil engineering*.

Millington AF. 2000. *An Introduction to Property Valuation, 5thEdt, Estates Gazette*.

Property Tax Division. 2002. *Real Property Valuation Standards of Practice*. Utah State <http://propertytax.utah.gov/index.php/information/forms/standards-of-practice-forms>.

RICS (Royal Institution of Chartered Surveyors) 2014. *The Role of International and Local Valuation Standards in Influencing Valuation Practice in Emerging and Established Markets*. London.

Tekeba & Friends. 2015. *Ethiopian Bankers Association (EBA) Real Property Valuation Manual*. Addis Ababa, Ethiopia

The Appraisal Foundation. 1998. *Uniform Standards of Professional Appraisal Practice*, p. I-10
yogesh kumar singh. 2006. *Fundamental of Research Methodology and statistics*. New Delhi.

..... 1981. *Principles of Valuation*. http://drsmau.in/pdf/prin_of_val.pdf.

APPENDIX.1

QUESTIONNAIRE

This questionnaire is design to **Assess the Real Property valuation method Practice in Ethiopian Banks- in Addis Ababa** for the partial fulfillment of the requirements for the award of Master's Degree in Construction Technology and Management. The information which is expected from the respondents has a great role for the success of this study and your responses will be treated with utmost confidentiality and will not be used for any purpose other than the objective of the study. Moreover, the results of the study will be reported in manner that could not identify you or your organization.

Present position _____

1. How many years have you worked on property valuation? _____

2. What types of property valuation techniques do you use?

- a) Income capitalization approach method
- b) Cost approach method
- c) Sales comparison
- Others

Please, specify _____

3. What is the purpose of property valuation in your Bank?

- a) Buying (Collateral)
- b) Selling (Foreclosure)
- c) Mortgage and Security of loans
- d) Tax Assessment
- e) Rental Purpose
- f) Asset Acquisition and Merger

Others please, specify)

4. Does your organization have a guideline to value properties?

- a) Yes b) No

(If No), How do property valuation _____

5. If your answer is yes for #4. What kind of real property valuation Guideline does your organization use?

- a) International Standard
b) Nationally Prepared Manual
 i. Ethiopia Bankers Association (EBA) Manual
 ii. Consultant
c) Particularly prepared by the organization itself

Other _____

6. What type of real property did you value in the past five years? How many

No	Types of property	Number of property valued (in Number)				
		2012	2013	2014	2015	2016
a	Land					
b	Office building					
c	Commercial building					
d	Industrial building					
e	Hotel					

Others, please specify

7. Have you ever seen any Discrepancy (Complain) during in using two or more methods?

- a) Yes b) No

8. If your answer is yes for #7, What are the reason for the real property discrepancy?

Please, specify (if any) _____

9. Do you have an independent Consultant or Supervisor during valuation in your Bank?

- a) Yes b) No

10. Does the consultant or supervisor improve the evaluation process either under-estimate or overestimate?

- a) Yes b) No c) Not Sure

11. In what aspect and extent does the consultant or supervisor inspect the valuation improve it?

- a) Fairness
b) Facilitation

Others, please specify: _____

12. Have you noticed improvements in the practice of property valuation in Ethiopia now days?

- a) Yes b) No c) Not sure

13. If your answer is yes for #12, what do you think the factors affect the valuation improvement in your Bank?

- a) The country economic growth activity
b) Availability of Expert in the country
c) Change in Government policy
d) Growth of private business makers or developers
e) Learning and growth of the professional/ asset valuator

Others, please specify:

14. Have you ever got the chance to see a property valued by two or more different banks in the same year?

- a) Yes b) No

15. If your answer is yes for #14, was there any significant variation in the valuation results?

- a) Yes b) No

16. What are the reason variation for real property assessment in your Bank?

- a) The Method to employed for Real Property valuation
- b) The purpose (objective) of the valuation
- c) Experience of valuator
- d) Guideline of Real Property Valuation

Others, please specify:

17. What do you think its impact on valuation from the Bank and Client side?

18. Have your bank ever been claimed by another organization, property owner, or an individual concerning the fairness of real property valuation result?

- a) Yes
- b) No

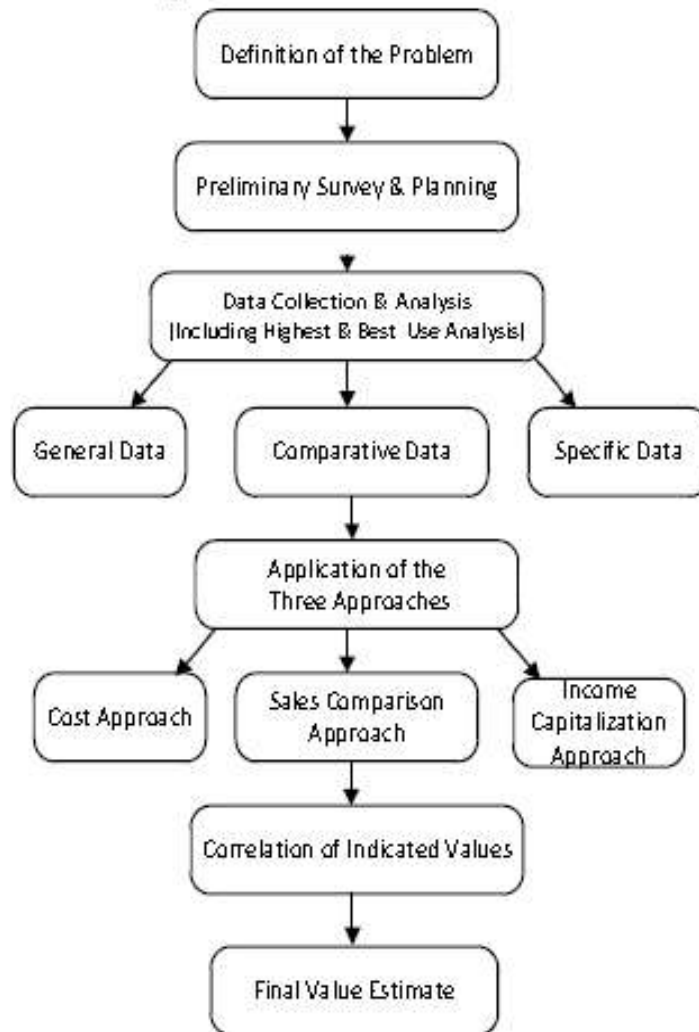
19. If your answer is yes for #18, what is the impact of this claim on your Bank?

Please, specify: -

20. What do you recommend to minimize variation in property valuation?

APPENDIX.2

International Standard Valuation Process Diagram of the Valuation Process



APPENDIX.3

Overview of The Valuation Process

Based on: IAAO, *Property Appraisal and Assessment Administration*, © 1990; and IAAO, *Property Assessment Valuation*, © 1977

1. Definition of the problem
 - a. Identification of property(ies) being appraised
 - b. Property rights being appraised
 - c. Effective date of appraisal
 - d. Purpose and function of appraisal
 - e. Definition of value being sought
2. Preliminary planning and survey
 - a. Preliminary estimation of highest and best use
 - b. Inventory of data items to be collected
 - c. Allocation of time and resources
3. Data collection
 - a. General data
 - i. National and regional
 - ii. Neighborhood
 - b. Comparative data cost
 - i. Sales
 - ii. Income and expense
 - c. Specific data site
 - i. Improvement
 - (1) Residential
 - (2) Commercial and industrial
4. Application of data
 - a. Cost approach
 - i. Land by sales comparison
 - ii. Reproduction/replacement-cost-new (RCN)
 - iii. Depreciation
 - (1) Physical deterioration

- (2) Functional obsolescence
 - (3) Economic obsolescence
- iv. Replacement-cost-new-less-depreciation (RCNLD)
- b. Comparative sales approach
 - i. Methods
 - (1) Direct sales comparison
 - (2) Gross rent multiplier
 - (3) Multiple regression analysis
 - (4) Sales ratio trending
 - ii. Units of comparison
 - iii. Market adjustments (or regression modeling)
- c. Income approach
 - i. Potential gross income
 - ii. Vacancy and collection loss
 - iii. Effective gross income
 - iv. Operating expense analysis
- v. Net operating income
 - vi. Capitalization
 - (1) Direct capitalization
 - (a) Overall capitalization rate
 - (b) Income multipliers
 - (2) Yield capitalization
 - (a) Rate development
 - (i) Discount rate development
 - 1) Build-up method
 - 2) Band of investment method
 - 3) Market comparison method
 - (ii) Recapture rate development
 - 1) Straight-line method
 - 2) Annuity method
 - (iii) Effective tax rate

- (b) Discounted cash flow analysis
 - (i) Annuity capitalization
 - (ii) Split rates
 - (c) Net present value (NPV)
 - (d) Internal rate of return (IRR)
 - (i) Modified internal rate (MIR)
 - (ii) Financial management rate of return (FMRR)
 - (e) Mortgage-equity capitalization techniques
 - (i) Conventional
 - (ii) Ellwood
 - (3) Residual capitalization techniques
 - (a) Building residual
 - (b) Land residual
 - (c) Property residual
5. Correlation of indicated values
- a. Amount and reliability of data from each approach to value
 - b. Inherent strengths and weaknesses of each approach
 - c. Relevance of each approach to the subject property
6. Final value estimate